

## City of Florida City 2010 Annual Drinking Water Quality Report

**Este informe contiene informacion muy importante sobre agua de deber. Traduzcalo o hable con alguien que lo entienda bien. Si usted quiere este reporte de Calidad de Agua en Español, por favor llamar a este numero de telefono 305-248-6855.**

We're pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is the Biscayne Aquifer. The water is chlorinated for disinfection.

If you have any questions about this report or concerning your water utility, please contact the Utilities office at 305-248-6855. We encourage our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. The City of Florida City routinely monitors for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2010. Data obtained before January 1, 2010, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations. In the table below, you may find unfamiliar terms and abbreviations.

In the table below, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Action Level (AL): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

Maximum residual disinfectant level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum residual disinfectant level goal or MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Parts per million (ppm) or Milligrams per liter (mg/l): one part by weight of analyte to 1 million parts by weight of the water sample.

Parts per billion (ppb) or Micrograms per liter (µg/L): one part by weight of analyte to 1 billion parts by weight of the water sample.

Picocurie per liter (pCi/L): measure of the radioactivity in water.

A Source Water Assessment was conducted by FDEP for our water system. The results showed petroleum storage tanks as potential contamination sources. The risk is moderate. SWAPP results are available at FDEP SWAPP web site: [www.dep.state.fl.us/swapp](http://www.dep.state.fl.us/swapp).

All drinking water, including bottled drinking, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk".

Microbiological Contaminants						
Contaminant	Dates of sampling (mo./yr.)	Violation Y/N	Total Number of Positive Samples for the Year	MCLG	MCL	Likely source of contamination
<i>E. coli</i> (at the ground water source)*	Monthly 2010	N	1	0	0	Human or animal fecal waste

On December 10, 2009, we sampled the sources (Wells) for the fecal-indicator, *E. coli*. We were notified on December 11 that Well 1 tested positive for *E. coli*. On December 12, we took additional samples and were notified that all samples tested absent for *E. coli*. Monthly sampling since that time have indicated that all wells have been absent of *E. coli*. Fecal Coliform/*E. coli* Health Effects: Fecal coliforms and *E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
<b>Radiological Contaminants</b>							
Alpha emitters (pCi/L)	7/08	N	2.6	N/A	0	15	Erosion of natural deposits
Radium 226+228 or combined radium (pCi/L)	7/08	N	1.5	N/A	0	5	Erosion of natural deposits

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
<b>Inorganic Contaminants</b>							
Barium (ppm)	7/08	N	0.015	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	7/08	N	0.11	N/A	4	4	Erosion of natural deposits; water additive which promotes strong teeth when at optimum levels between 0.7 and 1.2 ppm; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen) (ppm)	1/09	N	1.5	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	1/09	N	0.027	N/A	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	7/08	N	22	N/A	N/A	160	Salt water intrusion, leaching from soil

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
<b>Stage 1 Disinfectant/Disinfection By-Product (D/DBP) Contaminants</b>							
For chlorine, the level detected is the the highest running annual average, computed quarterly, of monthly averages of all samples collected. For haloacetic acids and TTHM, the level detected is the average of all samples taken during the year.							
Haloacetic Acids (five) (HAA5) (ppb)	11/10	N	18.3	13.1-22.9	NA	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	11/10	N	71.175	58.3-84.1	NA	MCL = 80	By-product of drinking water disinfection
Chlorine (ppm)	Monthly 2010	N	1.26	1.08-1.5	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes

\*We did not complete required disinfection by-product sampling during the correct monitoring period (7/1 – 9/30). Therefore we were in violation of monitoring and reporting requirements. Because we did not take the samples on time, we did not know whether the contaminants were present in your drinking water, and we are unable to tell you whether your health was at risk during that time. The required Disinfection By-Product monitoring was completed in November 2010.

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
<b>Lead and Copper (Tap Water)</b>							
Copper (tap water) (ppm)	10/08	N	0.98	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	10/08	N	1.3	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Florida City Water Treatment Plant is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- (E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).